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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,830	09/12/2003	David S. Peacock JR.	C2013-7138	7710
30623	7590	03/21/2006	EXAMINER	
MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C. ONE FINANCIAL CENTER BOSTON, MA 02111			TRINH, MINH N	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,830

Applicant(s)

PEACOCK ET AL.

Examiner

Minh Trinh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) 1-9, 11-32 and 52-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10 and 33-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/2/05, 7/26/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group III (claims 10 and 33-51) in the reply filed on 1/9/06 is acknowledged. Thus, claims 1-9, 11-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election dated 1/9/06 was made **without** traverse. Further, it is noted that claims 10 and 33-51 are readable on the elected group III and species IIIA. Claim 32 is directed to a nonelected method invention II and being withdrawn from consideration. An Examination on the merits of Group IIIA, claims 10, 33-51 as follows:

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: --Dispensing apparatus—or the like.

3. The abstract line 1 should have been revised to reflect the elected apparatus invention.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claim 38 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear whether "the pallet" and "a work piece" (claim 38, lines 2) is one of the plural pallets and work pieces as previously represented in claim 36 ?

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 10, 34-35, 47, 49-50 and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Baba (5,290,134).

Baba discloses an apparatus for performing operations on a plurality of work pieces comprising: an operations portion 20 and a load/unload portion 26, 30 (see Fig. 1); a plurality of independently operable work heads (28, 32a, b) located in the operations portion, the work heads each being operable to perform work on the plurality of work pieces 42's; and a transfer system, the transfer system including a plurality of mounting devices 44's, see Fig. 1), the transfer system 54 being operable to deliver the mounting devices 44's into and out of the operations portion of the system, wherein the plurality of work pieces 42's are contained in work piece-holding structures, the work piece-holding structures being mountable on the plurality of mounting devices 44's, and

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wherein one of the plurality of mounting devices 44's is positioned in the operations portion of the system and work is performed on the plurality of work pieces by at least one of the plurality of independently operable work heads 36a, b while another one of the plurality of mounting devices 44's is positioned in the load/unload portion of the system and work piece-holding structures are unloaded from the mounting devices (see Figs. 1-2, and the discussion at cols. 6-7).

Limitations of claims 34-35, 47, 49-50 are also satisfied by Baba reference (see Fig. 1, which shows the features recited in these claims i.e., trays 42's or pallet for hold electronic substrate or the like, and magazine 40 and test heads 36a, b for testing the work pieces, etc.

As applied to claim 51, it would have been an obvious matter of design choice to provide a laser process on the work pieces since applicant has not disclosed that the features as claimed above would solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the mounting system of Baba reference. It is noted that claim 51 does not seem to further limit the claimed apparatus because it is directed to a process and system other that the claimed apparatus.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 33, 39-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baba (5,290,134) in view of Purcell et al (6,206,964). Baba does not disclose the work heads are dispensing heads, and the related features of claims 39-42, 48. Purcell et al appear to teach the above feature i.e., dispensing head for dispensing system 10 (see Figs. 1-2, col. 3, lines 14-67), gantry system 22, and dispensing needle (col. 6, lines 35-45, col. 8, lines 4-10), vision inspection system associated therefrom (see col. 7, lines 48-52). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to utilize the teaching provided by the Purcell et al reference onto the system invention of Baba as so to facilitate the dispensing material process.

Limitations of claims 39-42 are also met as the above discussion.

As applied to claims 43-45, regarding limitations of a detector, a weight scale and a pre-dispense plate for receiving an amount of dispensing material, it would have been an obvious matter of design choice to provide the above features for the dispensing system since applicant has not disclosed that the features as claimed above would solves any stated problem or is for any particular purpose and it appears that the

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invention would perform equally well with the control system for as disclosed by the Purcell reference (see col. 2, lines 26-43, and col. 1, lines 48-65, etc.).

10. Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baba (5,290,134) in view of Sato (6,036, 425).

Baba does not disclose where the mounting devices as pallets and their function associated with the holding structures as recited in claims 36-38. Sato discloses the above (see Fig. 1 and the discussion at cols. 5-6). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to employ the Seto's teaching of pallets for holding work pieces on to the invention of Baba for various known benefits that including transporting and holding of the work piece effectively.

As applied to claim 37, it would have been an obvious matter of design choice to provide the pallets with vacuum for holding component since applicant has not disclosed that the features as claimed above would solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the conventional pallets as shown in figure 1 of Seto reference.

Allowable Subject Matter

11. Claim 38 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (571) 272-4569. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mt
3/17/06


MINH TRINH
PRIMARY EXAMINER